DOCUMENT RESUME

ED 450 858 JC 010 243

AUTHOR	Curtis, John W.
TITLE	Germanna Community College Student Outcomes Assessment, 1997-98: A Progress Report to the Virginia Community College System.
INSTITUTION	Germanna Community Coll., Locust Grove, VA.
PUB DATE	1998-09-15
NOTE	14p.
PUB TYPE	Reports - Research (143)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Academic Achievement; *College Outcomes Assessment; *College Transfer Students; Community Colleges; Computer Uses in Education; Educational Testing; Higher Education; *Remedial Programs; Student Placement; *Telecourses; Two Year Colleges
IDENTIFIERS	*Virginia

ABSTRACT

This document presents a brief summary of findings and actions over the last two years in three areas of Germanna Community College's overall student outcomes assessment program. First, program-placed students were tracked from developmental courses into subsequent collegiate coursework. While developmental student performance was roughly comparable to non-developmental students in subsequent English courses, completion rates in a transfer math course sequence were lower. Second, transfer data indicated that Germanna students performed equally well in senior college English and psychology courses compared to students who completed prerequisites at the senior college. However, lack of additional empirical data from Germanna's primary transfer destinations has impeded more extensive assessment of transfer student success. Third, enrollment in technology-mediated courses (telecourses, compressed video and Web-based courses) was found to represent 4% of total credit instruction during 1997-98, an increase after a decline in enrollment during 1996-97. The "non-completion rate" for telecourses in 1997-98 was 17.5%, compared to a 9% rate for traditional on-campus courses. Only 38% of respondents who enrolled in the most popular compressed video course (Spanish) said they would recommend it to a friend as a compressed video course, while 76% would recommend it as a non-video course. (PGS)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 450 858

Germanna Community College

Student Outcomes Assessment 1997-98

A Progress Report to the

Virginia Community College System

John W. Curtis

Director of Institutional Research and Planning

September 15, 1998

FL010243

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

H. W. Ward

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE

Table of Contents

Section I. Executive Summary 1

Section II. Developmental Education 3

A. New Findings 3

B. Use of results 5

C. Problems in assessing developmental education, and proposed solutions 5

D. Exemplary processes 5

E. Self-evaluation of Progress 5

Section III. Transfer Student Success 7

A. New Findings 7

B. Use of results 8

C. Problems in assessing transfer student success 8

D. Exemplary processes 9

E. Self-evaluation of Progress 9

Section IV. Topic of General State Interest: Technology-mediated learning 11

A. New Findings 11

B. Self-evaluation of Progress 13

Section I.

Executive Summary

Student Outcomes Assessment 1997-98 presents a brief summary of new findings and actions in three specific areas of Germanna Community College's overall student outcomes assessment program, according to the VCCS reporting guidelines in effect since 1995. For the first two of these areas, which were last formally reported in 1996, the present report covers activities during the last two academic years. The final section responds to a "Topic of General State Interest," and covers activities over an extended period.

- Section II reports on assessment activities in developmental education, including evaluations of the course placement process, enrollment and persistence in developmental courses, and success in subsequent college-level coursework.
- Section III reports on transfer student success, utilizing initial information from the "Course-Based Model of Transfer Success" project directed by Thomas Nelson Community College.
- Section IV reports on the "Topic of General State Interest," which is learning outcomes in technology-mediated instruction. The section compares completion rates and grades for courses offered in technology-based formats (telecourses, compressed video, and Web-based) with those offered in traditional formats. It also provides an initial student evaluation of instructional quality in compressed video courses.

This summary report does not include data tables or supporting documentation, which are available from the Office of Research and Planning.

Section II.
Developmental Education

Like the other Virginia community colleges, Germanna's educational programs are available to all who may benefit from them—regardless of prior academic preparation. As a consequence of this policy, many of the students who enter Germanna are not academically prepared for collegiate coursework. They may have pursued a "vocational" program in high school, with or without the benefit of a Tech Prep college-oriented curriculum; they may have attended high school many years ago, or not at all; or they may have decided only later in their lives to attempt a post-secondary education. Other students are enrolling in order to improve their job-related skills after some time in the workplace, or in order to move up in a changing labor market. For all these students, developmental coursework provides an opportunity to refresh unused skills, or to fill gaps in previous academic preparation. Developmental courses prepare students for success in collegiate coursework.

This section presents the results of an analysis of placement and developmental coursework at Germanna between 1994 and 1998. Data for this analysis were obtained through the VCCS Research and Assessment Data Support System (RADSS). The analysis describes the overall context for developmental coursework, as part of a comprehensive program of transfer, occupational, and general interest courses; identifies the patterns of student placement into developmental courses and actual enrollment in those courses; and tracks students from developmental courses into collegiate coursework, comparing their success in those classes with students who have not enrolled in developmental courses.

A. New Findings

Goal(s)/Objective(s) Being Assessed

1. To assess the effectiveness of the placement process, whereby students are identified for developmental assistance to prepare them for success in college-level courses.
2. To track the persistence of students identified for developmental coursework, as they enroll in and complete developmental courses, and as they make the transition from developmental to college-level courses.
3. To evaluate the success of students completing developmental coursework in attempting college-level courses, in comparison with non-developmental students.

Evaluation Method(s)

1. Analysis of data on the identification of students for developmental coursework (placement), and their subsequent enrollment in developmental math and English courses.
2. Analysis of data on completion and persistence patterns for students enrolling in developmental courses, and then in subsequent college-level courses.

Findings, 1994-95 through 1997-98

1. Developmental courses comprised less than 6% of total credit enrollment during each of the last four academic years (1994-95 through 1997-98). However, among math offerings (MTH courses only) the proportion is much higher, at 39%.

Identification for and enrollment in developmental coursework

2. Earlier analyses (*Student Outcomes Assessment Report 1995-96*) included all students enrolled in a given term, and calculated a proportion of approximately 60% who were identified as requiring developmental coursework. However, each semester a substantial proportion of Germanna students are enrolled in classes for personal development, and are not pursuing any degree or certificate program. These students are not required to complete placement testing (or provide SAT scores) and therefore frequently have not been evaluated in terms of their preparation for college-level English and math courses. In order to give a more accurate picture of which students are identified for developmental coursework, therefore, **the present analysis includes only program-placed students**.
3. From Summer 1994 through preliminary enrollment for Fall 1998, 6,164 students were enrolled in a degree or certificate program. Approximately 77% (4,726) of these students had placement scores on file.
4. Of the students with placement scores, approximately 75% (3,565 of 4,726) were identified for developmental coursework. Of these, 934 (26.2%) were recommended for developmental English, and 3,372 (94.7%) were recommended for developmental math. (These proportions include some students who were recommended for both.)
5. Approximately 60% of the 3,565 students identified for developmental coursework had enrolled in developmental courses by the Fall of 1998. This proportion varies between students recommended for developmental English (63% enrolled) and math (58%), but especially according to the student's curriculum. Most of the students identified for developmental courses who were enrolled in transfer degree programs (69%) had already taken developmental courses, while only 47% of students in occupational degree programs and 34% of students in certificate programs had enrolled.
6. It should also be noted that, among those students for whom developmental courses were not recommended, some 15% chose to enroll in developmental courses on their own initiative.

Developmental course outcomes

7. Over the period covered by this analysis, approximately 64% of the students who enrolled in developmental courses completed them satisfactorily. (Standard grades are not assigned in developmental courses.) This proportion applies generally to both English and math courses, and does not vary substantially between those who were recommended for developmental coursework, and those who chose the developmental course despite initial placement at the college level.

Further, two different measures are available for examining the success of developmental course completers in subsequent college-level courses:

8. In **English 111** "College Composition I," among program-placed students who were identified for developmental English, the students who enrolled in developmental courses achieved essentially the same average grade as those who did not enroll in the developmental course (GPA 2.37 vs. 2.38) and were slightly more likely to complete ENG 111 successfully (72% earning a 'C' or better, compared to 67%).

9. A slightly different comparison between students who completed the developmental writing course (ENG 01) and those who did not take any developmental course also shows that the developmental completers achieved similar results: 70% of the students who completed ENG 01 successfully achieved at least a 'C' in ENG 111, compared with 74% of non-developmental students, although the latter did achieve higher average grades (GPA 2.73 vs. 2.36).

10. Among students taking courses in the transfer **math** sequence (MTH 151, 163, 173, or 240) there is a clearer gap between students enrolling in developmental courses and those who do not. Among program-placed students identified for developmental math, a lesser proportion of the students who *did* enroll in developmental courses completed college-level math courses successfully (71% earning a 'C' or better) than among the identified students who *did not* enroll in developmental courses (81% of whom achieved at least a 'C').

11. However, when developmental course completers are compared with students taking college-level math who did not take a developmental course, the gap is somewhat narrower. Approximately 75% of the students who completed MTH 03, 04, or 05 subsequently achieved at least a 'C' in the college-level math courses listed above. The comparable proportion among non-developmental students in those courses was 79%, and the latter also earned slightly higher average grades (2.76 vs 2.66). While these differences attain statistical significance, they do show that developmental completers perform comparably to their non-developmental classmates.

B. Use of results

As part of the ongoing review of the placement and developmental education process, faculty in communications and humanities disciplines recommended two changes which have been implemented for 1997-98:

- Offering ENG 06 "Reading in the Content Area" as a co-requisite for students with "borderline" results on the reading placement test.
- The developmental placement thresholds for reading were raised across the board: for referral to local Adult Basic Education programs, placement in developmental courses, and for "unrestricted" placement in content courses.

C. Problems in assessing developmental education, and proposed solutions

- Faculty members continue to question the validity of the COMPASS exam for math placement, as currently administered. There is a concern about the "adaptive" nature of the test, and whether students truly understand how this form of testing works.

- Faculty also have concerns about other aspects of placement testing (e.g., the testing environment and students' lack of preparation for testing) and the advising procedure (e.g., availability of placement scores in a timely fashion and the need to integrate additional high school background information into advising).
- It appears that a significant, although undetermined, proportion of students are shifted to courses different from their initial placement on the basis of placement tests. Faculty in both English and math courses frequently use their own initial diagnostics, and advise students who appear to be incorrectly placed to move to more appropriate courses. These changes are not recorded in the placement data available through SIS and RADSS for later analysis.
- The College's Teaching and Learning Committee, in collaboration with the faculty of the Communications and Humanities discipline cluster, undertook a review of the placement process during 1997-98. The review included informal surveys of faculty regarding the process, and collection of data from other VCCS colleges. The initial review produced changes for 1998-99 as noted in (B) above. The Teaching and Learning Committee is charged with the completion of a more formal review during 1998-99.

D. Exemplary processes

While the task sometimes appears daunting, Germanna faculty and staff continue to examine the placement and developmental education processes, utilizing a mixture of concrete empirical data and anecdotal observations. Significant progress has been made during the last two years, and is a continuing goal for 1998-99.

E. Self-evaluation of Progress

Germanna is making satisfactory progress in assessing developmental education.

Section III.
Transfer Student Success

A. New Findings

As of this writing, the only new data available on the success of Germanna's students in transferring to baccalaureate colleges and universities has been provided by Thomas Nelson Community College through its Course-Based Model of Transfer Success (CBMTS) project. This first section summarizes the information provided in the CBMTS report for Germanna (April 1998).

Goal(s)/Objective(s) Being Assessed

- To evaluate the success of students who complete prerequisite courses at Germanna in attempting upper-division courses at transfer institutions.

Evaluation Method(s)

- CBMTS tabular data for 1993-94 through 1996-97, showing completion of specific courses at six transfer institutions for three groups: students who completed prerequisites at the transfer institution ("native" students); students who completed prerequisites at Germanna; and students who completed prerequisites at other VCCS colleges.

Findings

1. The data is presented as a table of results in specific upper-level courses at six colleges over a period of four years, and therefore compiles tens of thousands of course completions. Despite this large amount of data, however, the tables generally provide information for less than ten Germanna students in any given course, which is an insignificant basis for valid statistical comparisons. Aggregated comparisons at the discipline level are also not directly useful, as different upper-division courses in the same discipline have different prerequisites. The data must therefore be transformed.
2. Using crosswalk tables provided with the report, it is possible to identify the transfer college courses which have a common prerequisite. The data can then be re-tabulated to produce meaningful information. The information presently available provides sufficient outcomes information on two course areas: courses for which ENG 111-112 is a prerequisite, and courses for which PSY 201-202 is a prerequisite.
3. In *English* courses, students who completed their prerequisites at Germanna performed equally well with those who completed prerequisites at the transfer institutions. Of the Germanna students, 84.4% attained at least a 'C' or a 'Pass' in the target courses, compared with 85.7% of the students completing prerequisites at the senior college. A slightly higher proportion of students who completed prerequisites at other VCCS colleges (88.0%) was successful. These overall differences are not substantial.

4. Among the three institutions which produced sufficient data for individual comparisons, only George Mason University showed a different pattern. Of students who completed their English prerequisites at GMU, 93.3% completed the upper-division courses successfully. Among other VCCS college students, the proportion was 92.3%. The proportion of Germanna students—although still quite substantial—was relatively lower, at 84.0%.
5. In *psychology* courses, Germanna students again performed comparably well with the other groups. Students with Germanna prerequisites completed the upper-level courses successfully in 80.0% of the tabulated cases, while the comparable proportions for "native" students and students from other VCCS colleges were 84.3% and 83.2%, respectively.
6. Only two colleges produced sufficient numbers for individual comparisons: At Old Dominion University, the Germanna success rate was slightly lower than that for the other two groups; at Radford University, the Germanna success rate was slightly higher. These differences are quite small, however, and should not be exaggerated.

B. Use of results

The analysis of the CBMTS data summarized above has been shared with faculty members in the relevant disciplines, and provides a useful initial basis for a discussion of specific transfer outcomes. However, the data as presently constituted are limited in two respects: they do not include results from Germanna's primary transfer destination (Mary Washington College); and they are presented in a format which makes interpretation difficult. The Assessment Coordinator is pursuing further analysis within the context of this project.

Although the lack of additional empirical data on student success—especially from Germanna's primary transfer destinations—has precluded program-specific improvements, the College has undertaken continued efforts to improve the quality of its preparation for transfer and the process of transfer advising:

- Following a recommendation arising from the SACS accreditation process, the College's Curriculum Committee developed a list of approved electives for transfer degree programs. Courses on the list meet a twofold standard: they have been accepted for transfer by Virginia public colleges and universities, and they are taught by appropriately qualified faculty.
- Germanna's Counseling unit has expanded the amount of transfer-related information available to students. A significant new source of transfer information is *College Source*, an online resource which provides access to 7,000 college catalogs.

C. Problems in assessing transfer student success, and proposed solutions

The greatest obstacle to a complete assessment of the success of Germanna's transfer students remains the difficulty in obtaining data from senior institutions. Since the 1996 analysis, which was based on improved reporting from transfer colleges for that year, only two of Germanna's five primary transfer institutions have provided *any* new data. Further, the following difficulties with the quality of the reported data remain:

- *Format* - several institutions still do not submit data in the format approved by the Virginia Assessment Group and SCHEV. Some utilize different file formats (e.g. spreadsheet files), some provide inconsistent data record layouts, and some include different coding for "standard" variables. Although these differences are not insurmountable, their cumulative effect is to make the analysis more cumbersome—and likely less accurate.
- *Completeness* - Most data records do not include the actual academic standing variable—although many institutions ostensibly create a location for the information in the dataset, and others provide a "default" code for this variable. Several colleges do not provide student-identifiable information on non-enrollees, which creates a serious weakness in the analysis of admission and enrollment rates.
- *Follow-through* - The colleges which have reported, with one or two exceptions, do not provide information for more than one year following transfer.

The direct exchange of data between transfer colleges and Germanna has not been successful to this point. Although expanded efforts on Germanna's part to make contact might well bring better results, it does appear that a duplication of effort is taking place. Our recommendation is that SCHEV take the lead in releasing individually-identifiable data on transfer success to the community colleges.

Germanna will also collaborate with Thomas Nelson Community College to pursue additional analysis from the CBMTS project, and supports continued funding for that effort.

D. Exemplary processes

Although the College's efforts to date in assessing transfer student success are satisfactory, they do not rate a label of "exemplary."

E. Self-evaluation of Progress

Although some progress has been made since this topic was last reported in 1996, the College's progress in assessing transfer student success is best characterized as "uneven". This is due primarily to a lack of the data necessary for a complete analysis, as discussed in (C) above.

Section IV.
Topic of General State Interest: Technology-mediated Learning

Germanna expanded its instructional offerings to include technology-based formats with the addition of telecourses during 1994-95. The telecourses have been broadcast over local cable television stations and have also been available on videotapes. For the 1997-98 academic year, the College added courses delivered through compressed video to the Commonwealth classrooms at both campuses. These courses included both offerings transmitted between the campuses and courses offered from other VCCS colleges. In Spring 1998, Germanna also offered a Web-based psychology course on a pilot basis.

A. New Findings

Goal(s)/Objective(s) Being Assessed

- To determine whether student retention and success rates for technology-mediated instruction are comparable to those for other modes of instructional delivery.
- To identify the appropriate audience(s) for technology-mediated instruction.
- To identify specific aspects of technology-based instructional delivery which may present barriers to student learning, and to remove those barriers wherever possible.

Evaluation Method(s)

1. Comparison of course completion and withdrawal rates by mode of instruction.
2. Comparison of grade distribution (GPA) by mode of instruction. This analysis gives an indication of the relative success of students enrolled in alternative format courses.
3. Comparison of student demographics by mode of instruction, as a means of determining the "target population" for technology-mediated instruction.
4. Student evaluation of instruction, with specific components which address aspects of technology-based instructional delivery that may present barriers to student learning.

Findings

- Following a decline during 1996-97, enrollment in telecourses increased substantially for 1997-98. Enrollment in all technology-based courses—telecourses, compressed video, and Web-based—comprised 4% (71.5 AFTES) of total credit instruction during 1997-98.
- A previous report on completion patterns for students enrolled in telecourses ("An Assessment of Distance Learning Activities Delivered in Telecourse Format," June 1996, summarized in the 1996-97 *Assessment Report*) noted the comparatively high rate of withdrawals and incompletes among telecourse students. The report recommended several changes in telecourses, which were implemented beginning in Fall 1996. This resulted in a decrease in the "non-completion rate" from 18.4% in 1994-95 to 9.3% in 1996-97. However,

this same rate returned to its previously high level for 1997-98, at 17.5%. (The comparable rate for traditional on-campus courses was approximately 9% throughout the period.)

- Average grades in telecourses over the four-year period 1994-95 through 1997-98 did not differ significantly from grades in on-campus courses (GPA 2.88 vs. 2.84). However, it is worth noting that telecourse grade averages rose substantially during the period, from 2.44 in 1994-95 to 3.01 in 1997-98. This is due in part to the improved completion rates noted above, but still bears further analysis. Average grades in compressed video and Web-based courses during 1997-98 matched the on-campus average exactly at 2.84.

- Because the number of offerings has remained relatively small, the demographic composition of enrollment in technology-mediated courses has been significantly influenced by changes in specific course offerings from one semester to another. During 1997-98, the only year in which all current forms of instructional technology were employed, there were only three consistent differences discernible between technology-mediated and traditional on-campus courses: In *telecourses*, more of the students were female, and more were enrolled in transfer degree programs; in *compressed video* courses, students were slightly younger on average. Enrollment in the single Web-based course did not provide a basis for a demographic comparison.

A specifically revised student evaluation of instruction was completed in all six sections of Spanish taught through compressed video between Germanna's two campuses in Fall 1997. (Spanish courses comprised the largest single component of technology-based instruction during the year.) The evaluation produced the following results:

- A majority of students (70%) would have preferred to take the course *without* utilizing compressed video. However, more students prefer to take the compressed video course than would be willing to travel to the opposite campus. Although this point may be essentially moot, it does indicate that the medium created some type of barrier for the students.

- In what is perhaps the key finding of the evaluation, two-thirds of the students (67%) stated that they had been *less* willing to participate in discussions as part of the video course than they would have been in a "standard classroom" course.

- The key difficulty in the video courses seemed to be the audio component, as 55% of respondents rated their ability to hear the instructor or students at the opposite campus as only "Fair" or "Poor". A smaller proportion (38%) gave negative ratings to the video quality, and a majority (54%) felt that the course was appropriate for the medium.

- The vast majority of students gave the instructor positive marks for availability (78%), timely return of graded materials (95%), course outline (95%), course notes (92%), relevance of assignments (87%), and adherence to course objectives (94%).

- In summary, only 38% of respondents would recommend the course to a friend as a compressed video course, while 76% would recommend it as a *non*-video course.

Changes resulting from assessment findings

1. The revised student evaluation of instruction will be utilized in all courses taught through compressed video beginning with Fall 1998.
2. The evaluation instrument developed for compressed video instruction will be revised for use in Web-based courses.
3. It is imperative that the College develop direct assessments of student learning in technology-mediated courses which addresses the acquisition of specific skills or knowledge. Where possible, this assessment should provide a basis of comparison with the same course offered in a different format, as has been done previously for off-campus and dual enrollment courses.
4. Policies and procedures for telecourses, which were developed as part of a "Strategic Plan for Distance Learning Activities" in 1996, are being utilized more systematically again for 1998-99. The "Strategic Plan" document will be revised to incorporate policies and procedures for compressed video and Web-based courses.

B. Self-evaluation of Progress

Germanna is making satisfactory progress in developing an assessment program for technology-mediated learning.